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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,712	06/04/2001	Tsutomu Hoshino	2382-19	9070

7590 11/09/2004

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EXAMINER

DAHBOUR, FADI H

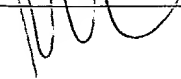
ART UNIT

PAPER NUMBER

3743

DATE MAILED: 11/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/871,712	Applicant(s) HOSHINO ET AL. 	
	Examiner Fadi H. Dahbour	Art Unit 3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

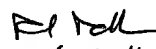
- 4) ☒ Claim(s) 1-44 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-34 and 36-44 is/are allowed.
- 6) ☒ Claim(s) 1,8,10,13 and 35 is/are rejected.
- 7) ☒ Claim(s) 2-7,9,11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.


11/1/04

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Examiner acknowledges Applicant's submission of the amendment filed on 06/14/2004. Claims 1-44 are now pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 8, 10, 13, 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Darrow et al (U.S.5,265,610).

Darrow discloses a magnetic resonance imaging system for interventional MRI involving an operation to insert a device into an object, having a tip and being gradually inserted into the object from the tip thereof (Figs.1-6), comprising detection means for detecting a position of a tip of the device within the object (see "position...of an invasive device, such as a catheter...has a transient coil attached near its end...that can be detected" in lines 1-6 of abstract), and movement state display means for displaying information in relation to a movement state of the tip of the device on the basis of data indicative of the position of the tip detected by the detection means (Figs.1 & 6, also see "signals are...sent to a tracking computer for analysis...to solve for the position and orientation of the transmitting coil. This positional information is then superimposed on multiple...images to give the operator real-time information on the three-dimensional location of the invasive device within the subject" in lines 1-8 of col.2, also see "wherein the imaging means comprises a Magnetic Resonance imaging system" in lines 19-20 of

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col.10), wherein the movement state display means is configured to display the data indicative of the position of the tip detected by the detection means (Figs.1 & 6, also see "signals are...sent to a tracking computer for analysis...to solve for the position and orientation of the transmitting coil. This positional information is then superimposed on multiple...images to give the operator real-time information on the three-dimensional location of the invasive device within the subject" in lines 1-8 of col.2, also see "wherein the imaging means comprises a Magnetic Resonance imaging system" in lines 19-20 of col.10), together with time information indicative of a sequence of time in detecting the data (see "real-time" in line 7 of col.2), wherein the movement state display means is configured to display in a superimposition manner, the data of the position of the tip detected by the detection means on a reference image (Figs.1 & 6, also see "signals are...sent to a tracking computer for analysis...to solve for the position and orientation of the transmitting coil. This positional information is then superimposed on multiple...images to give the operator real-time information on the three-dimensional location of the invasive device within the subject" in lines 1-8 of col.2, also see "wherein the imaging means comprises a Magnetic Resonance imaging system" in lines 19-20 of col.10), wherein the device is a catheter to be inserted into the object (see "catheter" in line 2 of abstract).

Allowable Subject Matter

4. Claims 2-7, 9, 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claims 14-34, 36-44 are allowed.

Response to Arguments

6. Applicant argues that Darrow et al does not disclose movement state display means for displaying information in relation to a movement state of the tip of the device on the basis of data indicative of the position of the tip detected by the detection means, however, Darrow discloses such (see Figs.1 & 6, also see "signals are... sent to a tracking computer for analysis... to solve for the position and orientation of the transmitting coil. This positional information is then superimposed on multiple... images to give the operator real-time information on the three-dimensional location of the invasive device within the subject" in lines 1-8 of col.2, also see "wherein the imaging means comprises a Magnetic Resonance imaging system" in lines 19-20 of col.10 of Darrow).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fadi H. Dahbour whose telephone number is 703-306-5479. The examiner can normally be reached on M-F, 9am-5:30pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A. Bennett, can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


11/1/04

Fadi H. Dahbour
Examiner
Art Unit 3743